

# **ANNAMACHARYA UNIVERSITY**

(Estd A.P. Private Universities (Establishment and Regulation) Act, 2016)
RAJAMPET-516126, Annamayya District, A.P, INDIA

# ACADEMIC REGULATIONS (AU24), COURSE STRUCTURE AND SYLLABI

For the students admitted to

B. Tech., Regular Four-Year <u>Undergraduate</u> Degree Programme from the Academic Year 2024-25, B.Tech., Honors and Minors

and

B. Tech., Lateral Entry Scheme from the Academic Year 2025-26

# **VISION AND MISSION OF THE UNIVERSITY**

# **VISION**

To be a globally recognized university by providing value-based education and promoting innovation and research for societal betterment

#### **MISSION**

The mission of the University is:

- 1. To embody 'Vidwan Sarvatra Pujyathey'.
- 2. To deliver high-quality education by encouraging research, innovation, and critical thinking
- 3. To nurture upright individuals by fostering an inclusive environment and inspiring service to society

# ACADEMIC RULES AND REGULATIONS OF FOUR-YEAR B. TECH REGULAR DEGREE PROGRAMME

APPLICABLE FOR THE STUDENT BATCHES ADMITTED FROM THE ACADEMIC YEAR 2024-25
APPLICABLE FOR THE STUDENTS (Lateral Entry) ADMITTED FROM THE ACADEMIC YEAR 2025-26

#### **CONTENTS**

- 1. Preamble
- 2. Regulations Commencement
- 3. Eligibility for Admission
  - 3.1 Admission into Engineering Undergraduate Programmes (Regular)
  - 3.2 Admission into Second Year (Lateral Entry Scheme)
- 4. Medium of Instruction
- 5. B.Tech. Programme Structure
- 6. Programmes Offered by The University
- 7. Courses and Credit Structure
  - 7.1 Types of Courses:
    - 7.1.1 Foundation Courses
    - 7.1.2 Professional Core Courses
    - 7.1.3 Professional Core Electives
    - 7.1.4 Open Electives
    - 7.1.5 Massive Open Online Courses
    - 7.1.6 Skill Oriented Courses / Skill Advanced courses
    - 7.1.7 Mandatory Courses
    - 7.1.8 Universal Human Value Courses
    - 7.1.9 Language Elective
- 8. Evaluation Process
  - 8.1 Internal Evaluation
    - 8.1.1 Theory Internal Evaluation
    - 8.1.2 Assignments
    - 8.1.3 Lab Internal Evaluation
    - 8.1.4 Internal Evaluation of Mandatory Courses
    - 8.1.5 Make-Up Internal Examination
    - 8.1.6 Evaluation of Skill oriented / Skill advanced / Soft Skills course
  - 8.2 End Evaluation
    - 8.2.1 Theory End Evaluation
    - 8.2.2 Lab End Evaluation
    - 8.2.3 Supplementary Theory/Lab End Examinations
    - 8.2.4 Challenge Evaluation, Revaluation and Recounting
- 9. Internship and Project Evaluation
  - 9.1 Summer Internship/ Research Internship
  - 9.2 Project Work

- 10. Credit Transfer Policy
- 11. Academic Bank of Credits (ABC)
- 12. Curricular Framework for Honors Programme
- 13. Curricular Framework for Minor Programme
- 14. Attendance Requirements and Detention Policy
- 15. Minimum Academic Requirements and Award of the Degree
- 16. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) 16.1 Conversion of SGPA into Percentage
- 17. Transcripts
- 18. Transitory Regulations
- 19. Readmission of Students
- 20. Minimum Instruction Days for a Semester
- 21. Student Transfers
- 22. Announcement of Results
- 23. General Instructions

#### 1. PREAMBLE

Annamacharya University, is a private University, established under the brownfield category as per the Andhra Pradesh Private Universities (Establishment and Regulation) Act of 2016 (Act No. 3 of 2016), subsequently amended by Act No. 2 of 2024, as published in the Extraordinary Gazette of Andhra Pradesh via gazette notification G.O.Ms. No. 13 dated 13.03.2024. The University Grants Commission (UGC) has included it in the list of UGC-listed Universities vide letter no. xxx dated xx.08.2024.

Annamacharya University, Rajampet, relentlessly aims to achieve academic excellence by implementing new initiatives in teaching-learning and evaluation processes. Based on the directions of the University Grants Commission (UGC), New Delhi, All India Council for Technical Education (AICTE), New Delhi, Department of Higher Education, Government of Andhra Pradesh, and Andhra Pradesh State Council of Higher Education (APSCHE), the university has adopted the AICTE and APSCHE model curriculum with minor modifications to match the needs, expectations, and skill sets of students in the state, in both the undergraduate and postgraduate programs offered from the academic year 2024-25.

Annamacharya University is promoting enhanced learning abilities through the integration of various skills into the curriculum, including (a) Critical Thinking, (b) Problem Solving, (c) Analytical Reasoning, (d) Scientific Reasoning, (e) Reflective Thinking, and (f) Design Thinking etc.,

#### **Objectives:**

The objectives of offering the B. Tech program are:

- 1. To empower students to focus on conceptual and empirical engineering knowledge.
- 2. To encourage a multidisciplinary perspective.
- 3. To encourage depth and breadth in understanding complex issues.
- 4. To provide broad interdisciplinary training with a well-sequenced curriculum over a sufficient length of time, giving students adequate preparation in their chosen field, either for higher studies or professional career.

#### **Academic Council:**

The academic council in a private university plays a pivotal role in maintaining and enhancing the academic standards and quality of education. The academic council coordinates and exercises general supervision over the academic policies of the university.

# The Department Board of Studies (BoS):

Each department within the School of Engineering will have a Board of Studies common to the UG, PG, and Doctoral programs offered by the department. The Dean/Head of the department will serve as the Chairman of the Department Board of Studies. The Board of Studies has been constituted as per the guidelines of the university statutes. The rules, regulations, curriculum, syllabus, and other academic matters shall be approved by the Board of Studies before being placed in the Academic Council and subsequently the Board of Management.

# Office of the Dean, Academics:

The office of the Dean, Academics, is responsible for the implementation of the decisions taken on academic matters by the Academic Council. The office:

- Receives, processes, and maintains all records relating to the programs, including curricula, courses offered, academic calendar, registration, assessments, and grades.
- Disseminates information pertaining to all academic matters, issues necessary memoranda/orders, and acts as a channel of communication between the students, instructors, and departments.
- Provides information about various academic programs, rules, and regulations to students.

#### 2. REGULATIONS COMMENCEMENT

- The regulations are quite comprehensive and include definitions of key terms, semester system, credit system, grading system, and other relevant details.
- The regulations detailed herein shall apply to all the regular under-graduate programmes offered by the University.
- The regulations shall be applicable and come into force to the student batches admitted from the academic year 2024-25 and Lateral Entry students admitted from the academic year 2025-26.

- The University may revise, amend or change the regulations, scheme of examinations and syllabi, from time to time, if found necessary and on approval by the Academic Council of the University, keeping the recommendations of the Board of Studies (BoS) in view.
- Any or all such amendments shall be effective from such date and to such batches of students including those already undergoing the programme, as may be approved through Academic Council of the University.
- These regulations shall be called AU24 Regulations.

#### 3. ELIGIBILITY FOR ADMISSION

#### 3.1 Admission into Engineering Under Graduation Programmes (Regular)

The eligibility criteria for admission into engineering undergraduate programmes offered at Annamacharya University shall be as prescribed by Statutes and Ordinances of the University and Higher Education Department, the Government of Andhra Pradesh. The criteria are given below:

- The candidate shall be an Indian National / NRI.
- The candidate should have completed 16 years of age as on 31<sup>st</sup> December of the academic year for which the admissions are being conducted.
- The candidate should have passed the qualifying examination (10+2) or equivalent as on the date of admission recognized by Board of Intermediate, Andhra Pradesh.
- Seats in each programme in the University are classified into two categories i.e.,
   Brownfield and Greenfield. Further under brownfield category seats are filled through two categories, i.e., Category A and Category B as per the GOs of Andhra Pradesh.

#### **BROWNFIELD CATEGORY:**

The existing institution is converted into a brownfield university. The admission of students into the existing approved intake will be regulated by the admission rules and seat-sharing policies applicable to the University, as defined under Section 2(4-A) of the Andhra Pradesh Private Universities (Establishment and Regulation) Act, 2016. This means that 70% of the seats in the existing courses at the university will be filled through the convener of EAPCET. In this category, the seats are filled through Convener quota / Category – A and Management Quota / Category – B.

#### Category – A Seats (70% of seats)

These seats shall be filled through counselling as per the rank secured by a candidate in the Common Entrance Test (EAPCET) conducted by the Government of Andhra Pradesh and as per other admission criteria laid down in the GOs.

# Category – B Seats (30% of seats):

These seats shall be filled by the University through AUET and the GOs issued by the Government of Andhra Pradesh from time to time. Annamacharya University Entrance Test (AUET) is conducted across India for those seeking admission to Engineering programmes offered by Annamacharya University. The eligibility criteria for appearing for AUET, the format, and other details will be specified in the application form and will be determined by the Office of the Director, Admission, Annamacharya University for the respective year of admissions.

#### **GREENFIELD CATEGORY:**

Furthermore, the admission rules for the brownfield university regarding any additional intake, new courses, or additional courses approved after conversion shall follow the regulations applicable to a greenfield university.

The university shall reserve 35% of seats in engineering, science, and other programs for the Government Quota and admit students in accordance with the rules prescribed for any additional intake in existing programs, as per the Andhra Pradesh Private Universities (Establishment and Regulation) Act, 2016.

#### Category – A Seats (35% of seats)

These seats shall be filled through counselling as per the rank secured by a candidate in the Common Entrance Test (EAPCET) conducted by the Government of Andhra Pradesh and as per other admission criteria laid down in the GOs.

# Category – B Seats (65% of seats):

These seats shall be filled by the University through AUET and the GOs issued by the Government of Andhra Pradesh from time to time. Annamacharya University Entrance Test (AUET) is conducted across India for those seeking admission to Engineering programmes offered by Annamacharya University. The eligibility criteria for appearing for AUET, the format, and other details will be specified in the application form and will be determined by the Office of the Director, Admission, Annamacharya University for the respective year of admissions.

#### 3.2 Admission into Second Year (Lateral Entry Scheme)

A candidate shall be admitted into the third semester (II year I semester) based on the rank secured by the candidate in the Engineering Common Entrance Test (ECET) by the Government of Andhra Pradesh and AUET examination conducted by university as per other admission criteria laid down in the Ordinances and Principal Act.

#### 3.2 Authority for Admission:

Any matter related to admission to the B.Tech., programme, the decision of the Office of the Director, Admissions is final.

# 3.3 Revoking / Cancellation of Admission:

All students admitted provisionally to any program must submit copies of their original mark sheets, provisional certificates, and any other documents required by the Director of Admissions by the last date specified in the Academic Calendar of Annamacharya University.

The Registrar, based on the recommendation of the Director of Admissions, may cancel the admission of any student who fails to submit the prescribed documents by the specified date or does not meet other stipulated requirements. Additionally, the Registrar may cancel the admission later if it is discovered that the student provided false information, suppressed information, misrepresented facts, or forged documents while seeking admission or thereafter, and report the matter to the Vice Chancellor.

#### 4. MEDIUM OF INSTRUCTION

The medium of instruction shall be **English** for all the courses including their content delivery and examinations, seminars, presentations, and project evaluation as prescribed in the programme curriculum.

#### 5. B.TECH. PROGRAMME STRUCTURE

The structure of the B.Tech. Programmes on offer at Annamacharya University are based on the **Choice Based Credit System (CBCS)** as defined by the UGC and the curriculum / course structure as suggested by the AICTE, UGC and APSCHE in its Model Curriculum.

#### **Semester Scheme**

- The B. Tech Programmes offered at Annamacharya University follow semester scheme pattern.
- The duration of a B. Tech. Programme shall be of **4 academic** years for 4-year B. Tech programmes **and 3 academic years** for 3-year B. Tech programmes in lateral entry scheme.
- Each academic year shall have **2 semesters** i.e., odd and even semesters and shall be counted as I Year I Semester, I Year II Semester, and II Year I Semester and so on up to IV Year II semester.
- Each semester shall consist of 16 weeks of instructions.
- Each semester is structured to provide credits totalling to 160 credits for the entire B.Tech.
   Programme.
- Each semester shall have **Continuous Internal Evaluation (CIE)** and **Semester End Examination (SEE)** for both Theory and Lab courses.
- Each student is required to secure a total of 160 credits with a CGPA ≥ 5 for the completion
  of the UG programme and the award of the B.Tech. Degree.
- A student after securing admission into a 4-year B. Tech Programme at Annamacharya University shall pursue and acquire the B.Tech. degree in a minimum period of four academic years i.e., 8 semesters and a maximum period of eight academic years i.e., 16 semesters starting from the date of commencement of I year I semester, failing which the student shall forfeit the seat in B.Tech. Programme.
- A student after securing admission into a 3-year B. Tech Programme (Lateral Entry) at Annamacharya University shall pursue and acquire the B.Tech. Degree in a minimum period of three academic years i.e., 6 semesters and a maximum period of six academic years i.e.,
   12 semesters starting from the date of commencement of II year I semester, failing which the student shall forfeit the seat in B.Tech. programme.
- University shall take measures to implement Virtual Labs (https://www.vlab.co.in) which
  provide remote access to labs in various disciplines of Engineering and will help student in
  learning basic and advanced concept through remote experimentation. Student shall be
  made to work on virtual lab experiments during the regular labs.

#### 6. PROGRAMMES OFFERED BY THE UNIVERSITY

The following B. Tech. programmes are offered as specializations by the University from the 2024-25.

SNo	Name of the Program	Programme Code
1	Civil Engineering	CIV
2	Electrical and Electronics Engineering	EEE
3	Mechanical Engineering	MEC
4	Electronics and Communication Engineering	ECE
5	Computer Sciences and Engineering	CSE
6	Artificial Intelligence and Data Science	AID
7	Artificial Intelligence and Machine Learning	AIM
8	Computer Science and Engineering (Artificial Intelligence)	CSI
9	Computer Science and Engineering (Data Science)	CSD
10	CSE (Artificial Intelligence and Machine Learning)	CSM
11	CSE (Internet of Things and Cyber Security including Block Chain Technology	CIC

#### 7. COURSES AND CREDIT STRUCTURE

**Credit:** A credit is a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (Lecture/Tutorial) or two hours of practical work/field work/project per week.

**Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year. **Choice Based Credit System (CBCS):** CBCS provides choice for students to select from the prescribed courses.

Each course is assigned certain number of credits based on following criterion.

T (C)	Semester		
Type of Class	Periods per Week	Credits	
Theory	01	01	
(Lecture/Tutorial)	02	02	
	02	01	
Practical	03	1.5	
	04	02	
Project Work / Internship	_	16	

Every course of the B. Tech. programme shall be offered by a specific section / department. The unique codes of the section / department offering the courses are given in the Table.

Course offering Department	Code
Basic Science Courses	Mathematics – MAT Physics – PHY Chemistry -CHE English – ENG
Humanities and Social Science Courses including Management Courses	HSMC
Civil Engineering	CIV
Electrical and Electronics Engineering	EEE
Mechanical Engineering	MEC
Electronics & Communication Engineering	ECE
Computer Science & Engineering	CSE
Artificial Intelligence and Data Science	AID
Computer Science and Engineering (Artificial Intelligence)	AIM
Computer Science and Engineering (Data Science)	CSI
Artificial Intelligence and Machine Learning	CSD
CSE (Internet of Things and Cyber Security including Block Chain Technology	CIC

Every B. Tech. Programme of study shall be designed to have theory and laboratory courses. In addition, a student shall carry out internship, project, socially relevant project, and other mandatory courses as prescribed in the curriculum of the Programmes.

# 7.1 Types of Courses:

TYPE OF COURSES	COURSE CATEGORY	CODE	Credit Distribution	Percentage of Total Credits (%)	ACITE Recommendation (%)
	Engineering Sciences	ESC	23.5	14	10-18
	Basic Sciences	BS	20	13	12-16
Foundation	Humanities & Social Sciences and Management	HSM	13	8	8-9
Core	Professional Core	PC	54.5	34	30-36
Project	Project (12) Internship (4)	PROJ	16	10	8-11
	Professional Elective	PE	33	33 21	19-23
Elective courses	Open Elective (Including two MOOCs)	OE			
	Domain Specific Skill Oriented Courses	SEC			
Mandatory Courses	Mandatory	МС	-	-	-
Total Credits			160	100	100

#### 7.1.1 Foundation Courses

Engineering Science courses, Basic Science Courses and Humanities courses are termed as Foundation Courses and are mostly offered at I and II Year.

#### 7.1.2 Professional Core Courses

Professional Core Course is to be completed by all students of respective programme before they can move on to the next semester.

#### 7.1.3 Professional Core Electives

University Grants Commission has come up with the Choice Based Credit System (CBCS) in which the students have a choice to choose from the prescribed courses, which are referred as Professional elective and Open Elective courses. All the Professional and Open elective courses shall be offered for 3 credits.

Students have to register for a total of 5 professional core electives courses (PE-1 to PE-5) from the list of track-wise professional elective course as prescribed in the course structure of the programme. The following points are considered for a Professional Elective Course.

- Maximum strength of a class /section for each semester shall be 72.
- A course may be offered to the students, only if a minimum of 24 students (1/3 of the section strength) opts for it.
- The selection of course based on the choice for students shall be on 'first come first serve' through online and offline registration.
- The Head of the department or concerned shall decide, whether or not to offer such course keeping in view the resources available in the department offering the course.

#### 7.1.4 Open Electives

Choice Based Credit System (CBCS) is promoted in such a way that different open elective courses should be offered by every department in engineering to other departments. This interdisciplinary of learning open elective courses by other department students will have learning awareness and job-oriented benefits. Students will have the opportunity to choose any open elective course from different departments and apply their knowledge to acquire jobs in that field of course. Learning and employment benefits are not only through their own course subjects but also through open elective courses.

Every student shall earn prescribed credits by choosing one of the open elective courses from the list of Open Electives given in the Curriculum. Two Open electives (OE1 & OE2) are to be chosen from the repository of **inter-disciplinary MOOCs** courses offered by NPTEL or any other recognized Institutions/Organization. Students shall consult their mentors before opting for an open elective course (MOOCs).

Further students from a particular program/branch can opt for one Open Elective (OE3) offered by their concerned department. However, one Open Electives (OE4) is inter-disciplinary and shall be offered by other branches.

The following guidelines are pertaining to Open Elective Courses.

- Maximum strength of a class /section for each semester shall be 72.
- A course may be offered to the students, only if a minimum of 24 students (1/3 of the section strength) opts for it. The minimum number of students is required to register the course to offer opted course in the department.
- The selection of course based on the choice for students shall be on 'first come first serve' through online and offline registration.
- The Head of the department or concerned shall decide, whether or not to offer such course keeping in view the resources available in the department offering the course.

# 7.1.5 Massive Open Online Courses as Open Elective

- MOOCs (Massive Open Online Courses) are introduced to meet with the global requirements and to inculcate the habit of self-learning and in compliance with the UGC guidelines.
- A student shall be permitted to pursue up to a maximum of two electives courses under
   MOOCs during programme. Each of courses must be of minimum 12 weeks in duration.
- Concerned departments **shall declare the list of inter-disciplinary** courses that a student can pursue through MOOCs at the beginning of the corresponding semester.
- Students interested in pursuing MOOCs shall register for the course and submit this information at their department office at the start of the corresponding semester.
- Course content for the selected MOOCs shall be drawn from the respective MOOCs offering Portal.
- Course progress shall be monitored by the Mentors designated by the Dean / HoD.
- Grade obtained through the evaluation of the MOOC shall be considered for the CGPA calculation.
- Three credits shall be awarded to the student upon successful completion of MOOC.

In case a student fails to complete the MOOCs he/she shall re-register for the same with
the same provider, already offered that course. In case that provider discontinues to
offer the course, University shall conduct an offline examination in the same format,
which student already appeared in online examination, as per the MOOCs syllabus.

#### 7.1.6 Skill Oriented Courses / Skill Advanced courses

- There shall be 4 skill-oriented courses offered during 3<sup>rd</sup> to 7<sup>th</sup> semester. Among the 4 skill-oriented courses, 3 courses shall focus on the basic to advanced skills related to the domain courses and remaining 1 shall be a soft skills course.
- Skill oriented / skill advanced courses carry 2 credits
- For skill oriented/skill advanced course, 1 theory and 2 practical hours may be allotted as per the decision of concerned BOS.
- Out of the 4 skill courses, 2 skill courses shall be skill-oriented courses from the same domain and shall be completed in 2<sup>nd</sup> year. Of the remaining 2 skills courses, 1 shall necessarily be a soft skill course and the remaining, 1 shall be skill advanced course either from the same domain or job-oriented skill course, which can be of inter-disciplinary nature.
- A pool of interdisciplinary job-oriented skill courses shall be designed by a common Board of studies by the participating departments and the syllabus along with the prerequisites shall be prepared for each of the laboratory infrastructure requirements.
- The student shall be given an option to choose either the skill courses being offered by the university or to choose a certificate course being offered by Industries/Professional Bodies/ APSSDC or any other accredited bodies as approved by the concerned BOS.
- If a student chooses to take a certificate course offered by Industries / Professional Bodies / APSSDC or any other accredited bodies, in lieu of the skill advanced course offered by the department, the credits shall be awarded to the student upon producing the course completion certificate from Industries/Professional Bodies/ APSSDC as approved by the concerned BOS.
- If a student prefers to take a certificate course offered by external agency, the
  department shall mark attendance of the student for the remaining courses in that
  semester excluding the skill oriented course in all the calculations of mandatory
  attendance requirements upon producing a valid certificate as approved by the

- concerned BOS, the student is deemed to have fulfilled the attendance requirements of the course and acquire the credits assigned to the course.
- A committee shall be formed at the level of the University to evaluate the grades/marks given for a course by external agencies and convert to the equivalent marks/grades. The recommended conversions and appropriate grades/marks are to be approved by the Academic Council of the University.

#### 7.1.7 Mandatory Courses

Courses such as Environmental Sciences, Gender sensitization, and Technical Paper Writing & IPR are offered as non-credit mandatory courses for all the undergraduate students.

- A student shall pursue mandatory courses as specified in the course structure of the
   B.Tech. Programme.
- These courses are among the compulsory courses and do not carry any credits.
- A student has to secure 40 marks out of 100 in the Internal Examination, shall be necessary requirement for the student to qualify for the **award of Degree**.
- Result of mandatory courses shall be declared with "Pass" or "Fail" performance in the Comprehensive Marks Memo.
- No marks or letter grade shall be allotted.
- Attendance in the mandatory course shall be considered while calculating aggregate attendance.

#### 7.1.8 Universal Human Values (UHV) Courses

- Universal Human Values-I shall be a mandatory student Induction Programme with no credits for freshers, with a two / three week duration before the commencement of first semester. Physical activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Dept./Branch & Innovations etc., are included as per the guidelines issued by UGC and AICTE.
- The Universal Human Values-II course carries 3 credits. The assessment is to provide a fair state of development of the student, so participation in classroom discussions, selfassessment, peer assessment etc. will be used in evaluation.

A student must secure 40% marks out of 100 in the CIE and SEE together to qualify for

the award of the degree. The distribution shall be 50 marks for continuous internal

assessment and 50 marks for semester end examination.

Internal evaluation shall be conducted for the course during semester and shall be

evaluated for 50 marks and distributions of marks as follows:

Assessment by faculty mentor: 10 marks

Self-assessment: 10 marks

o Assessment by peers: 10 marks

Socially relevant project/Group Activities/Assignments: 20 marks

7.1.9 Language Elective

The Language Elective course carries 1 credit. Students must register for either German,

French, Spanish, or Arabic based on their choice and complete the online certificate

course in the semester it is offered. One hour is allocated in the regular timetable, and

the teacher will guide the students, if they encounter any difficulties during the course.

Evaluation will include participation in classroom discussions, self-assessment only.

The course will be graded on a Pass/Fail basis. A pass grade is awarded upon verification

of the completion certificate.

Failure to complete the course within the stipulated time frame will result in no credit

being awarded, and the elective will need to be retaken.

A committee shall be formed at the level of the University to evaluate the grades/marks

given for a course by external agencies and convert to the equivalent marks/grades. The

recommended conversions and appropriate grades/marks are to be approved by the

Academic Council of the University.

19

8. Evaluation Process

The performance of a student in each semester shall be evaluated course-wise with a maximum

of 100 marks for both Theory and Lab Course.

• For a Theory course, the distribution shall be 40 marks for Internal Evaluation and 60

marks for End-Evaluation. The distribution is detailed in 8.1.1.

For a Lab course, the distribution shall be 40 marks for Internal Evaluation and 60 marks

End- Evaluations. The distribution is detailed in 8.1.3

Project Work shall be evaluated for 200 marks. Mandatory courses with no credits shall

be evaluated for 100 marks.

8.1 Internal Evaluation

For a Theory Course, 40 marks are allotted for Internal Evaluation. Two Internal examinations

(Theory Internal Examinations) shall be conducted for a Theory Course during a semester, and

they shall be evaluated for 40 marks of which 30 marks are given for Continuous Internal

Examination and 10 marks for assignment. For Lab Course, there shall be a continuous internal

evaluation during the semester for 40 marks.

8.1.1 Theory Internal Evaluation

Theory Continuous internal examination shall have Part A & Part B. In Part A, which is

compulsory, five short answer questions each of which carries 1 mark. There shall be no sub-

questions or bits. The examination shall be conducted for 2 hours.

Part B shall contain three either or type questions (Total six questions from 1 to 6). Each question

shall carry 10 marks. 30 marks allotted for Part B shall finally be scaled down to 25 marks. The

questions shall be set/ moderated such that the student can comfortably answer each question

within the stipulated time.

Question paper pattern for Continuous Internal Examination (30 Marks) shall be as follows:

**PART A**: Five short answer questions -  $5 \times 1 = 5$  Marks

PART B: 30 Marks (will be scaled to 25 marks)

(i) There shall be three questions with internal Choice i.e., 'either' or 'choice.'

(ii) The student shall answer three questions.

20

First Theory Continuous Internal examination shall be conducted as per the syllabus of I & II units. The second Continuous internal examination shall be conducted as per the syllabus of III, IV and V units. 80% weightage for the best performance and 20% the other shall be considered. Final value shall be rounded up.

For Example:

Marks obtained in I Internal examination: 19

Marks obtained in II Internal examination: 10

Final Internal Marks: (19x0.8) + (10x0.2) = 17.2

If the student is absent for any one Internal examination, the final internal marks shall be arrived at by considering 80% weightage to the marks secured by the student in the appeared examination and zero to the other.

For Example:

Marks obtained in first Internal: 0 (Absent); Marks obtained in second Internal: 18

Final Internal Marks: (18x0.8) + (0x0.2) = 14.4

For course namely, Engineering Graphics / Engineering Drawing, the distribution of internal evaluation and external evaluation marks shall be 40 and 60, respectively.

Of the 40 internal evaluation marks, day-to-day performance of the student shall be evaluated for 20 marks, and the examination shall carry 20 marks. Day-to-day work shall be evaluated by the concerned teacher based on the exercises, submissions, and assignments prepared in the class. Two examinations shall be conducted in a semester, each with a duration of 2 hours. Each examination is for 10 marks, with a weightage of 80% for the better of the two and 20% for the other. The sum of day-to-day work and the examination marks will be the final day-to-day evaluation for 40 marks for the subject. The final evaluation shall be for 60 marks and is of 3 hours duration, conducted internally. The question paper shall consist of 5 questions, one from each unit, with internal choice. All questions carry 12 marks each.

# 8.1.2 Assignment (Theory)

The assignment shall contain essay-type numerical questions, out-of-the-box thinking questions, etc. The assignments are given by the concerned teacher for 10 marks from the first two units.

The second assignment shall be given from the rest of the syllabus. The first assignment should be submitted before the first internal examination, and the second assignment should be submitted before the second internal examination. The number of questions is limited to 5, and teachers should frame the questions by considering all Course Outcomes. There shall be at least two assignments in a semester, and the average performance of the two assignments will be considered.

#### 8.1.3 Lab Internal Evaluation

Out of the 40 marks allotted for Lab Internal Evaluation, day-to-day performance of the student in the laboratory shall be evaluated for 20 marks by the concerned laboratory teacher based on experimental evaluation/record/viva. Two Lab Internal examinations shall be conducted for 20 marks by the concerned teacher. Performance of one best out of two tests to be considered. The day-to-day marks distributed as follows:

• Observation : 5 Marks

• Record : 5 Marks

Performing the experiment / Program / Activity : 10 Marks

# 8.1.4 Internal Evaluation of Mandatory Courses

Mandatory courses are offered with no credits. However, a student has to complete Mandatory Courses in order to be eligible for the award of the Degree. There shall be a Continuous Internal Examination for 100 marks. A student shall be declared to have passed the mandatory course only when he/she secures 40% or more in the internal examination. In case, the student fails, a supplementary examination shall be conducted.

# 8.1.5 Make-up Internal Examination

The student who has missed both the Theory Continuous Internal examinations will be permitted to appear for a Make-up Continuous Internal examination in the event of his/her producing satisfactory evidence of medical sickness. One Make-up internal test shall be conducted immediately after the II Continuous Internal examination in the same semester, covering the total syllabus of FIVE Units in the respective course.

This Make-up examination will be given a weightage of 80%. Make-up tests shall be conducted outside the working hours and there can be even two such examinations on a day.

Student absent for I Internal examination with valid reasons he/ she should produce a

supporting document to the department within a week after completion of last internal

examination. And the same student absent for same subject in II Internal examination, he/she

should produce a supporting document to the department immediately in order to giving the

provision for makeup examination.

Make-up internal examinations are not for improvement of marks in Theory Internal

examinations. There shall be no make-up internal examinations for a Lab course.

8.1.6 Evaluation of Skill oriented / Skill advanced / Soft Skills course

Course type: Laboratory

Distribution of marks: 40:60

**Evaluation Type: Internal Evaluation** 

A student is evaluated for a maximum of 100 marks with respect to skill-oriented course / Skill

advanced courses / Soft skill course. The distribution of marks shall be 40 for internal evaluation

and 60 for external evaluation. For Internal Evaluation, day-to-day performance of the student in

the laboratory shall be evaluated for 40 marks by the concerned skill-oriented course / Skill

advanced courses / Soft skill course class teacher based on experimental evaluation / discussions

/ results / reports. External evaluation is done for 60 marks in a laboratory end semester

examination conducted for 3 hours.

Note: Each skill-oriented course / Skill advanced courses / Soft skill course will have its own

evaluation procedure and weightage. The respective department prepare and provide the

evaluation format to the student in the beginning of the semester.

8.2 End Evaluation

8.2.1 Theory End Evaluation

As specified in 8.0, Theory End Evaluation is done for 60 marks. Semester End examination of

theory subjects shall be conducted at the end of semester. There shall be Regular and

Supplementary End Examinations. Theory Semester End Examination shall be conducted for 60

marks and is of 3 hours duration.

Theory Semester End Examination shall have Part A & Part B. In Part A, which is compulsory, five

short answer questions each unit of which carries two marks shall be given. There shall be no

sub-questions or bits or fill-up the blanks.

23

Part B shall contain five either or type questions (Total 10 questions with internal choice). 50 marks allotted for Part B and each question shall carry 10 marks. There will be one question from each unit. The examination shall be conducted for 3 hours.

Question paper pattern for Semester End Examination (60 Marks) shall be as follows:

**PART A**: 5 x 2 = 10 Marks

- (i) There shall be one question from each unit.
- (ii) Part A is compulsory.

**PART B**:  $5 \times 10 = 50 \text{ Marks}$ 

- (i) Five questions with internal choice will be given.
- (ii) There shall be one question from each unit with Internal Choice i.e., 'either' or 'choice'
- (iii) Sub questions may also be given.

#### 8.2.2 Lab End Evaluation

As specified in 8.0, Lab End Evaluation is done for 60 marks, in the form a Lab End Examination that shall be conducted for 3 hours in respective Laboratory. Each lab course will have its own evaluation procedure and weightage.

# 8.2.3 Supplementary Theory / Lab End Examinations

- Supplementary examination shall be conducted along with regular semester end examinations.
- During Semester End Examinations of even semester, supplementary examinations of odd semester shall be conducted and during semester end examinations of odd semester, supplementary examinations of even semester shall be conducted.
- The same schedule is applicable to Supplementary Lab End Examinations. Supplementary examination shall be conducted along with the next batch of students or separately.
- Advanced supplementary shall be conducted only for Final Year II semester Students in view of their higher education pursuits and placement opportunities.
- In case of seminars and comprehensive viva-voce examinations, supplementary seminar /
  comprehensive viva-voce will be conducted along with the next batch of students. If the
  next batch of students is not available, a separate supplementary examination will be
  conducted.

#### 8.2.4 Challenge Evaluation, Revaluation and Recounting

Students may visit Examination Section Webpage for Norms and Procedures for Challenge Evaluation, Revaluation and Recounting of Answer Scripts. (Refer to Appendix II).

# 9.0 Internship and Project Evaluation

# 9.1 Summer Internship / Research Internship (Industry / Govt. / NGO / MSME / Online)

- A student shall carry out a mandatory Internship for 2 months for 2 credits in 2<sup>nd</sup> year 2<sup>nd</sup> semester during summer vacation and it is evaluated during 3<sup>rd</sup> year 1<sup>st</sup> semester. A student shall carry a mandatory Industrial / Research Internship for 2 months for 2 credits in 3<sup>rd</sup> year 2<sup>nd</sup> semester during summer vacation and it is evaluated during 4<sup>th</sup> year 1<sup>st</sup> semester.
- Two summer internships, each with a minimum of 6 weeks duration. Done at the end of 2<sup>nd</sup> and 3<sup>rd</sup> year, respectively are mandatory. The internship can be done by the students at local industries, Govt. Organizations, construction agencies, Industries, Hydel and thermal power projects and also in software MNCs.
- Evaluation of the summer internships shall be through the departmental committee. A
  student will be required to submit a summer internship report to the concerned
  departments and appear for an oral presentation before the departmental committee.
   The report and the oral presentation shall carry 40% and 60% weightages respectively.
- In the final semester, the student should mandatorily undergo internships and parallel he/she should work on a project with well-defined objectives. At the end of the semester the candidates shall submit an internship completion certificate and a project report. A student shall also be permitted to submit a project report on the work carried out during the internship. The project report shall be evaluated by an external examiner.
- The respective departments shall facilitate and monitor the student internship programs.
   Completion of internships is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such cases, the student shall repeat and complete the internship.
- There shall also be mandatory full internship in the final semester of the programme along with the project work.
- For other details, please refer to Appendix I.

#### 9.2 Project Work

Project work consists of a presentation of **Abstract of the main project** in the beginning of 8<sup>th</sup> Semester. After selecting specific topic, the student shall collect the information and prepare a report, showing his/her understanding of the topic and submit the same to the department before presentation. Project shall be evaluated for a total of 200 marks. The technical presentation/report shall be evaluated by a committee consisting of Head of the Department along with two senior faculty members of the Department. A student shall acquire 12 credits assigned, if her/his report is declared Satisfactory by the committee based on Rubrics set by the Department for evaluation.

Out of a total of 200 marks for the **Project work**, the internal evaluation shall be carried for 50 marks done by a committee consisting of Dean / HOD, Project Supervisor and senior faculty member of the department and the remaining 150 marks shall be awarded by a committee consisting of Dean / HOD, project Supervisor and an External Examiner nominated by the Vice Chancellor or Dean Academics. The internal evaluation shall be done on the basis of two seminars conducted in a semester as per the academic calendar and stipulated rubrics. In case, if a student fails in Project work, a re-examination shall be conducted within a month. In case he/she fails in the re-examination also, he/she shall not be permitted register for viva voce examination. Further such students shall re-appear as and when next year 8<sup>th</sup> semester supplementary examinations are conducted.

# 10. Credit Transfer Policy

Adoption of MOOCs is mandatory, to enable Blended model of teaching-learning as also envisaged in the NEP 2020. As per University Grants Commission (Credit Framework for Online Learning Courses through SWAYAM) Regulation, 2016, the University shall allow up to a maximum of 20% of the total courses being offered in a particular programme i.e., maximum of 32 credits through MOOCs platform.

- i) The University shall offer credit mobility for MOOCs and give the equivalent credit weightage to the students for the credits earned through online learning courses.
- ii) Student registration for the MOOCs shall be only through the respective departments of the university, it is mandatory for the student to share necessary information with the department.

- iii) The credit transfer policy will be applicable to the Professional & Open Elective courses only.
- iv) The department concerned shall identify the courses permitted for credit transfer.
- v) The respective department shall notify at the beginning of semester the list of the online learning courses eligible for credit transfer.
- vi) The respective department shall designate a faculty member as a Mentor for each course to guide the students from registration till completion of the credit course.
- vii) The University shall ensure no overlap of MOOC exams with that of the University examination schedule. In case of delay in results, the University will re-issue the marks sheet for such students.
- viii) Students pursuing courses under MOOCs shall acquire the required credits only after successful completion of the course and submitting a certificate issued by the competent authority along with the percentage of marks and grades.
- ix) The respective department shall submit the following to the examination section of the University:
  - a) List of students who have passed MOOC courses in the current semester along with the certificate of completion.
  - b) Undertaking form filled in by the students for credit transfer.
- x) The university shall resolve any issues that may arise in the implementation of this policy from time to time and shall review its credit transfer policy in the light of periodic changes brought by UGC, SWAYAM, NPTEL and state government.

**Note:** Students shall be permitted to register for MOOCs courses offered through online platforms approved by the University from time to time.

#### 11. Academic Bank of Credits (ABC)

The University has implemented Academic Bank of Credits (ABC) to promote flexibility in curriculum as per NEP 2020 to

- i) Provide option of mobility for learners across the universities of their choice
- ii) Provide options to gain credits through MOOCs from approved digital platforms.

- iii) Facilitate award of certificate/diploma/degree in line with the accumulated credits in ABC
- iv) Execute Multiple Entry and Exit system with credit count, credit transfer and credit acceptance from students' account.

#### 12. Curricular Framework for Honors Programme

- Students of a Department/ Discipline are eligible to opt for Honors Programme offered by the same Department/Discipline
- A student shall be permitted to register for Honors program at the beginning of 4<sup>th</sup> semester provided that the student must have acquired a minimum of 7.5 SGPA up to the end of 2<sup>nd</sup> semester without any backlogs. In case of the declaration of the 3<sup>rd</sup> semester results after the commencement of the 4<sup>th</sup> semester and if a student fails to score the required minimum of 7.5 SGPA, his/her registration for Honors Programme stands cancelled and he/she shall continue with the regular Programme.
- Students can select the additional and advanced courses from their respective branch
  in which they are pursuing the degree and get an honors degree in the same. e.g. If a
  Mechanical Engineering student completes the selected advanced courses from the
  same branch under this scheme, he/ she will be awarded B. Tech (honors) in
  Mechanical Engineering.
- In addition to fulfilling all the requisites of a Regular B. Tech Programme, a student shall earn 20 additional credits to be eligible for the award of B. Tech (Honors) degree.
   This is in addition to the credits essential for obtaining the Undergraduate Degree in Major Discipline (i.e. 160 credits).
- Of the 20 additional Credits to be acquired, 16 credits shall be earned by undergoing specified courses listed as pools, with four courses, each carrying 4 credits. The remaining 4 credits must be acquired through two MOOCs, which shall be domain specific each with 2 credits and with a minimum duration of 8/12 weeks as recommended by the Board of studies.
- It is the responsibility of the student to acquire/complete prerequisite before taking
  the respective course. The courses offered in each pool shall be domain specific
  courses and advanced courses.

- The concerned BoS shall decide on the minimum enrolments for offering Honors
  program by the department. If minimum enrolments criteria are not met, then the
  students shall be permitted to register for the equivalent MOOC courses as approved
  by the concerned Head of the department in consultation with BoS.
- Each pool can have theory as well as laboratory courses. If a course comes with a lab component, that component must be cleared separately. The concerned BoS shall explore the possibility of introducing virtual labs for such courses with lab components. (Model pool list is enclosed at the end of the syllabus)
- MOOC courses must be of minimum 8 weeks in duration. Attendance will not be monitored for MOOC Courses. Students have to acquire a certificate from the agencies approved by the BOS with grading or marks or pass/fail in order to earn 4 credits. If the MOOC course is a pass/fail course without any grades, the grade to be assigned will be as decided by the Academies Council.
- The concerned BoS shall also consider courses listed under professional electives of the respective B. Tech Programmes for the requirement of B. Tech (Honors). However, a student shall be permitted to choose only those courses that he/she has not studied in any form during the Programme.
- If a student drops or is terminated from the Honors programme, the additional credits so far earned cannot be converted into free or core electives; they will remain extra. These additional courses will find mentioned in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a "pass (P)" grade and also choose to omit the mention of the course as for the following: All the courses done under the dropped Minors will be shown in the transcript. None of the courses done under the dropped Minor will be shown in the transcript.
- In case student fails to meet the CGPA requirement for Degree with Honors at any
  point after registration, he/she will be dropped from the list of students eligible for
  Degree with honors and they will receive regular B. Tech degree only, however, such
  students will receive a separate grade sheet mentioning the additional courses
  completed by them.

 Honors must be completed simultaneously with a major degree Programme. A student cannot earn Honors after he/she has already earned bachelor's degree.

#### 13. Curricular Framework for Minor Programme

- Students who are desirous of pursuing their special interest areas other than the choses discipline of Engineering may opt for additional courses in minor specialization groups offered by a department other than their parent department. For example, if Mechanical Engineering student select subjects from Civil Engineering under this scheme, he/she will get Major degree of Mechanical Engineering with minor degree of Civil Engineering.
   b) Student can also opt for Industry relevant tracks of any branch to obtain the Minor Degree, for example, a B. Tech Mechanical student can opt for the industry relevant
- The BOS concerned shall identify as many tracks as possible in the areas of emerging technologies and industrial relevance/demand. For example, the minor tracks can be the fundamental courses in CSE, ECE, EEE, CE, ME etc., or industry tracks such as Artificial Intelligence (AI), Machine Learning (ML), Data Science (DS), Robotics, Electric Vehicles, and VLSI etc.,

tracks like Data Mining track, IOT track, Machine Learning track etc.

- The list of disciplines / branches eligible to opt for a particular industry relevant minor specialization shall be clearly mentioned by the respective BoS.
- There shall be no limit on the number of programs offered under Minor. The university
  can offer minor programs in emerging technologies based on expertise in the respective
  departments or can explore the possibility of collaborating with the relevant
  industries/agencies in offering the Programme.
- The concerned BoS shall decide on the minimum enrolments for offering Minor program by the department. If a minimum enrolments criterion is not met, then the students may be permitted to register for the equivalent MOOC courses as approved by the concerned Head of the department in consultation with BoS.
- A student shall be permitted to register for Minors Programme at the beginning of 4<sup>th</sup> semester subject to a maximum of two additional courses per semester, provided that the student must have acquired 7.5 SGPA up to the end of 2<sup>nd</sup> semester without any history of backlogs. It is expected that the 3<sup>rd</sup> semester results may be announced after the commencement of the 4<sup>th</sup> semester. If a student fails to acquire 7.5 SGPA up to 3<sup>rd</sup>

- semester or failed in any of the courses, his/her registration for Minors program shall stand cancelled. An SGPA of 7.5 has to be maintained in the subsequent semesters without any backlog in order to keep the Minors registration active.
- A student shall earn an additional 20 credits in the specified area to be eligible for the award of B. Tech degree with Minor. This is in addition to the credits essential for obtaining the Undergraduate Degree in Major Discipline (i.e. 160 credits).
- Out of the 20 credits, 16 credits shall be earned by undergoing specified course listed by the concerned BoS along with prerequisites. It is the responsibility of the student to acquire/complete prerequisite before taking the respective course. If a course comes with a lab component, that component has to be cleared separately. A student shall be permitted to choose only those courses that he/she has not studied in any form during the Programme.
- In addition to the 16 credits, students must pursue at least 2 courses through MOOCs. The courses must be of minimum 8 weeks in duration. Attendance will not be monitored for MOOC courses. A student has to acquire a certificate from the agencies approved by the BOS with grading or marks or pass/fail in order to earn 4 credits. If the MOOC course is a pass/fail course without any grades, the grade to be assigned as decided by the Academic Council of the university.
- Students can opt for the industry relevant minor specialization as approved by the concerned departmental BoS. Students can opt for the courses from Skill Development Corporation (APSSDC) or can opt the courses from an external agency recommended and approved by concerned BOS and should produce course completion certificate. The Board of studies of the concerned discipline of Engineering shall review such courses being offered by eligible external agencies and prepare a fresh list every year incorporating the latest skills based on industrial demand.
- A committee should be formed at the level of University / Department to evaluate the
  grades/marks given by external agencies to a student which are approved by concerned
  BoS. Upon completion of courses the departmental committees should convert the
  obtained grades/marks to the maximum marks assigned to that course. The controller of
  examinations can take a decision on such conversions and may give appropriate grades.

- If a student drops (or terminated) from the Minor Programme, they cannot convert the earned credits into free or core electives, they will remain extra. These additional courses will find mentioned in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a "pass (P)" grade and also choose to omit the mention of the course as for the following:
  - All the courses done under the dropped Minors will be shown in the transcript.
     None of the courses done under the dropped Miner will be shown in the transcript.
- In case a student fails to meet the CGPA requirement for B. Tech degree with Minor at
  any point after registration, he/ she will be dropped from the list of students eligible for
  degree with Minors and they will receive B. Tech degree only. However, such students
  will receive a separate grade sheet mentioning the additional courses completed by
  them.
- Minor must be completed simultaneously with a major degree Programme. A student cannot earn the Minor after he/she has already earned bachelor's degree.

# 14. Attendance Requirements and Detention Policy

- A student shall maintain a minimum required attendance of 40% in each subject and 75% in AGGREGATE of all the subjects in a semester.
- Shortage of attendance up to 10% i.e., attendance between 65% to 75% in aggregate, may
  be condoned by the University Academic Committee based on the rules prescribed by the
  Academic Council of the University from time to time.
- A stipulated fee shall be payable towards condonation of shortage of attendance.
- Shortage of attendance below 65 % shall in no case be condoned. A stipulated fee shall be
  payable towards condonation of shortage of attendance to the University as per following
  slab system.
  - **1**<sup>st</sup>**Slab:** Less than 75 % attendance but equal to or greater than 70 % a normal condonation fee can be collected from the student.
  - **2**<sup>nd</sup>**Slab**: Less than 70 % but equal to or greater than 65 %, double the condonation fee can be collected from the student.
- Students whose shortage of attendance is not condoned OR who have not paid the stipulated fee OR who have not cleared any other due to the University in any semester are

not eligible to write the Semester End Examination (SEE).

- Students, who do not meet the minimum required attendance of 65% in a semester, shall be detained in that semester and their registration for that semester shall stand cancelled. They shall not be promoted to the next semester.
- Students detained in a semester shall seek re-admission into that semester as and when offered.
- Academic regulations applicable to the semester in which re-admission is sought shall be applicable to the re-admitted student.
- In case, there are any professional electives and /or open electives, the same may also be reregistered, if offered. However, if those electives are not offered in the later semesters, then
  alternate electives may be chosen from the same set of elective courses offered under that
  category.

Any student against whom any disciplinary action is pending shall not be permitted to attend Semester End examination (SEE) in that semester.

#### 15. Minimum Academic Requirements and Award of the Degree

The following academic requirements must be satisfied in addition to the attendance requirements mentioned in section 14.

- i) A student shall be promoted from first year to second year if he/she fulfills the minimum attendance requirement as per university norms.
- ii) A student will be promoted from II to III year if he/she fulfills the academic requirement of securing 40% of the credits (any decimal fraction should be rounded off to lower digit) up to in the subjects that have been studied up to III semester.
- iii) A student shall be promoted from III year to IV year if he/she fulfills the academic requirements of securing 40% of the credits (any decimal fraction should be rounded off to lower digit) in the subjects that have been studied up to V semester. And in case a student is detained for want of credits for a particular academic year by ii) & iii) above, the student may make up the credits through supplementary examinations and only after securing the required credits he/she shall be permitted to join in the V semester or VII semester respectively as the case may be.

- iv) When a student is detained due to lack of credits/shortage of attendance he/she may be re-admitted when the semester is offered after fulfillment of academic regulations. In such a case, he/she shall be in the academic regulations into which he/she is readmitted.
- v) Students who fail to earn 160 credits as indicated in the course structure within eight academic years from the year of their admission shall forfeit their seat on the B.Tech. course and their admission shall be cancelled.

# 16. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

As a measure of the student's performance, a 10-point Absolute Grading System using the following Letter Grades and corresponding percentage of marks shall be followed:

After each course is evaluated for 100 marks, the marks obtained in each course will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student fall.

**Structure of Grading of Academic Performance** 

Range in which the marks in	Grade	Grade points
the subject fall	0.000	Assigned
90 & above	Superior	10
80 - 89	A (Excellent)	9
70 - 79	B (Very Good)	8
60 - 69	C (Good)	7
50 - 59	D (Average)	6
40 - 49	E (Pass)	5
< 40	F (Fail)	0
Absent	Ab (Absent)	0

- i) A student obtaining Grade 'F' or Grade 'Ab' in a subject shall be considered failed and will be required to reappear for that subject when it is offered the next supplementary examination.
- ii) For non-credit audit courses, "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA/Percentage.

Computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade point scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.,

$$SGPA = \frac{\sum (C_i * G_i)}{\sum C_i}$$

Where  $C_i$  is the number of credits of the  $i^{th}$  subject and  $G_i$  is the grade point scored by the student in the  $i^{th}$  course

The Cumulative Grade Point Average (CGPA) will be computed in the same manner considering all the courses undergone by a student over all the semesters of a program, i.e.,

$$CGPA = \frac{\sum (C_i * S_i)}{\sum C_i}$$

Where  $S_i$  is the SGPA of the  $i^{th}$  semester and  $C_i$  is the total number of credits up to that semester.

Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts. While computing the SGPA the subjects in which the student is awarded Zero grade points will also be included.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale. Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by the letters S, A, B, C, D and F.

# **Award of Class:**

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of B. Tech. Degree, he/she shall be placed in one of the following four classes:

Class Awarded	CGPA Secured
First Class with Distinction	≥7.5
First Class	≥6.5 <7.5
Second Class	≥5.5 <6.5
Pass Class	≥5.0 <5.5

#### 16.1 Conversion of SGPA into percentage

In case of a specific query by students/employers regarding Semester Grade Point Average (SGPA)/ Cumulative Grade Point Average (CGPA) into percentage, the following formulae will be adopted for notional conversion of CGPA into percentage.

#### CGPA to Percentage conversion Formula – (CGPA – 0.5) x 10.

#### 17. Transcripts

After successful completion of the entire programme of study, a transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued, if required, after payment of requisite fee. Partial transcript will also be issued up to any point of study to a student on request.

#### 18. Transitory Regulations

Discontinued, detained, or failed candidates are eligible for re-admission as and when the semester is offered after fulfilment of academic regulations. Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered, subject to Section 2 and they will follow the academic regulations into which they are re-admitted.

Candidates who are permitted to avail gap year shall be eligible for re-joining into the succeeding year of their B. Tech from the date of commencement of class work, subject to Section 2 and they will follow the academic regulations into which they are re-admitted.

#### 19. Re-admission of Students

A student who has satisfied the minimum attendance requirement in any semester may repeat that semester, after obtaining written permission from the Registrar and cancelling the previous record of attendance and academic performance (viz; internal evaluation and external evaluation marks) of the semester or year. This facility may be availed by any student at the maximum twice for a 4-year B. Tech, and only once by Lateral Entry student during the entire course of study.

# 20. Minimum Instruction Days for a Semester

The minimum instruction days for each semester shall be 16 weeks.

#### 21. Student transfers

Student transfers shall be as per the statutes and ordinances of the Annamacharya University and guidelines issued by the Government of Andhra Pradesh from time to time.

#### 22. Announcement of results

- Results review committee comprising of Vice Chancellor, Registrar, Dean Academics, Chairman of various boards of studies, Controller of Examinations and Deputy Controller of Examinations will monitor the results and gives the permission for announcement of results.
- After review meeting results are loaded into university website from which students can
  access their results by entering Hall Ticket number. And also results in form of hard copy
  are available with respective Deans / Heads of the departments.

#### 23. General Instructions:

- The academic regulations should be read as a whole for purpose of any interpretation.
- Malpractices rules-nature and punishments are appended.
- Where the words "he", "him", "his", occur in the regulations, they also include "she", "her", "hers", respectively.
- In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice Chancellor / Registrar / Governing body is final.
- Any legal issues are to be resolved in Rajampet Jurisdiction.
- The University may change or amend the academic regulations or syllabi at any time and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the University.

#### **Appendix-I: Internship Guidelines**

The Dean / Head of the Department will arrange internship for students in industries / organization after fifth semester as per AICTE/ University guidelines. The university may also device online system for arranging & managing internships. The general procedure for arranging internship is given below:

- Step 1: Request Letter/ Email from the office of HOD of the department should go to industry to allot various slots of 4-6 weeks during summer vacation as internship periods for the students. Students request letter/profile/ interest areas may be submitted to industries for their willingness for providing the training.
- Step 2: Industry will confirm the training slots, and the number of seats allocated for internships via Confirmation Letter/ Email. In case the students arrange the training themselves the confirmation letter will be submitted by the students in the office of Training & Placement through concerned department. Based on the number of slots agreed to by the industry.
- Step 3: Students on joining Training at the concerned Industry / Organization, submit the Joining Report/ Letters / Email.
- Step 4: Students undergo industrial training at the concerned Industry / Organization. In-between Faculty Member(s) evaluate(s) the performance of students once/twice by visiting the Industry/Organization and Evaluation Report of the students is submitted in department office/TPO with the consent of Industry persons/ Trainers.
- Step 5: Students will submit training report after completion of internship.
- Step 6: Training Certificate to be obtained from industry.
- Step 7: List of students who have completed their internship successfully will be issued by concerned Department.

For more details refer:

https://www.aicte-india.org/sites/default/files/AICTE%20Internship%20Policy.pdf

#### Appendix II: Norms and Procedures for Challenge Evaluation/Revaluation/Recounting

# **Revaluation / Recounting:**

- The students who wish to apply for Revaluation/Recounting of his/her answer-books(s) must submit his/her application on the prescribed from together with the requisite fee to the Controller of Examinations before expiry of 15 days excluding the date of the declaration of his/her examination result. Application not received in the prescribed form or by the due date or without the requisite fee shall be rejected.
- After Recounting / Revaluation, records are updated with changes if any and the student will be issued a revised memorandum of marks. If there are no changes, the student shall be intimated the same through a notice.
- No Revaluation / Recounting for Laboratory Examination.
- The students are informed to be more careful in furnishing the information while applying for Recounting / Revaluation. The applications with insufficient information will be summarily rejected and the student has to forfeit the amount paid in this connection.

#### **Challenge valuation:**

- Applications are invited from the students who wish to apply for Challenge Valuation in the subjects of the B. Tech Regular and Supplementary examinations.
- The student will apply for Challenge valuation in a specified application and should be routed through the HOD concerned.
- The students who have applied for the revaluation for a paper(s) of an examination are only eligible for the Challenge Valuation of that paper(s) of that examination.
- A Fee of Rs. 10000/- (Ten Thousand Rupees Only) for each paper is to be paid within the last date for challenge valuation.
- A Xerox copy of the answer script will be provided to the student on receipt of the payment of fee and date and time of the valuation will be informed to the student, so that valuation will be done in the presence of the teacher attended in support of the student nominated by the HOD concerned.
- The HOD concerned will nominate a teacher of the concerned subject to observe the valuation in support of the student. This will be done at the request of the student.
- If the marks obtained in the challenge valuation are more than or equal to 15% of the maximum marks with respect to the original marks obtained in the first valuation, then the marks obtained in the Challenge valuation will be awarded to the student and the University will pay back Rs 9,000 (Nine thousand rupees only) to the student. If the student status changes from fail to pass, an amount of Rs. 5000 will be refunded to the student. Otherwise, there will not be any change in the result of the student and original marks will be retained and the student will forfeit the fee paid.
- No Challenge valuation for Laboratory Examination

# APPENDIX III: Rules for Disciplinary Action for Malpractices / Improper Conduct in Examinations

# Malpractices identified by squad or special invigilators or invigilators.

Punishments shall be given to the students as per the above guidelines. The case is to be referred to the malpractice committee.

# **Malpractice committee**

- 1. The Vice Chancellor, Chairman
- 2. Registrar, Member
- 3. Dean, Academics, Member
- 4. Invigilator, Member
- 5. Subject expert, Member
- 6. Concerned Dean / Head of the Department, Member
- 7. Controller of Examinations, Member Secretary

# Note:

Whenever the performance of a student is cancelled in any subject/subjects due to Malpractice, he has to register for End Examinations in that subject/subjects consequently and has to fill all the norms required for the award of Degree.

	Nature of Malpractices/Improper conduct	Punishment
	If the candidate:	
1.(a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
1(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the University.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred for four consecutive semesters from class

work all University examinations. The and continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for four consecutive semesters from class work and all University examinations, if his involvement is established. Otherwise, the candidate is debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him. Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including Smuggles in the Answer book or additional practical examinations and project work and shall not sheet or takes out or arranges to send out the be permitted for the remaining examinations of the question paper during the examination or subjects of that semester/year. The candidate is also answer book or additional sheet, during or debarred for two consecutive semesters from class after the examination. work and all University examinations. continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. Uses objectionable, abusive or offensive language in the answer paper or in letters to Cancellation of the performance in that subject only. the examiners or writes to the examiner requesting him to award pass marks. Refuses to obey the orders of the Chief Superintendent/Assistant — Superintendent / any officer on duty or misbehaves or creates In case of student of the University, they shall be disturbance of any kind in and around the expelled from examination halls and cancellation of examination hall or organizes a walk out or their performance in that subject and all other instigates others to walk out, or threatens the subjects the candidate(s) has (have) already appeared officer-in charge or any person on duty in or and shall not be permitted to appear for the outside the examination hall of any injury to remaining examinations of the subjects of that his person or to any of his relations whether semester/year. If the candidate physically assaults the by words, either spoken or written or by signs invigilator/officer-in-charge of the Examinations, then or by visible representation, assaults the the candidate is also debarred and forfeits his/her officer-in-charge, or any person on duty in or seat. In case of outsiders, they will be handed over to outside the examination hall or any of his the police and a police case is registered against them. relations, or indulges in any other act of misconduct or mischief which result in

	damage to or destruction of property in the examination hall or any part of the University campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.		
7.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.	
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.	
9.	If students of the university, who is not a candidate for the particular examination or any person not connected with the University indulges in nay malpractice or improper conduct mentioned in class 6 to 8.	Student of the university expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person (s) who does not belong to the University will be handed over to police and, a police case will be registered against them.	
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.	
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject only or in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester / year examinations, depending on the recommendation of the committee.	
12.	If any malpractice is detected which is not covered in the above clauses 1 to 12 shall be reported to the University for further action to award suitable punishment.		